

# Comparisons of Job Characteristics

**Focus Occupation:** Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)

**Associated Occupation:** Hydrologists (19-2043)

[Compare Knowledge](#)

[Compare Skills](#)

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<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 82

Focus Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)  
Associated Occupation: Hydrologists (19-2043)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mathematics	9.2	17.7	22.1	>>	Current knowledge level is likely more than sufficient
Engineering and Technology	5.7	17.4	12.8	<<	Extensive education and/or training may be required
Geography	3.9	16.7	17.2	0	Current knowledge level may be sufficient
Physics	4.3	15.7	21.0	>>	Current knowledge level is likely more than sufficient
Chemistry	4.8	15.6	15.0	0	Current knowledge level may be sufficient
Biology	3.7	13.6	11.6	<	Expanded education and/or training may be required
Design	5.2	12.6	9.8	<<	Extensive education and/or training may be required
Law and Government	5.9	11.3	5.1	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)  
Associated Occupation: Hydrologists (19-2043)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Critical Thinking	10.8	14.5	13.5	0	Current skill level may be sufficient
Science	4.5	13.0	11.9	0	Current skill level may be sufficient

Mathematics	6.2	12.8	8.9	<<	Extensive development of skills in this area may be required
Programming	2.2	6.5	1.3	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 88			
Focus Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051) Associated Occupation: Hydrologists (19-2043)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Inductive Reasoning	10.2	14.6	14.1	0	Current ability level may be sufficient
Written Comprehension	11.0	14.6	16.7	>	Current ability level is likely sufficient
Written Expression	9.8	14.1	17.5	>>	Current ability level is likely more than sufficient
Problem Sensitivity	11.1	13.9	10.5	<<	Extensive improvement in abilities may be required
Mathematical Reasoning	6.3	13.8	10.0	<<	Extensive improvement in abilities may be required
Deductive Reasoning	10.6	13.4	13.8	0	Current ability level may be sufficient
Flexibility of Closure	7.8	12.0	6.8	<<	Extensive improvement in abilities may be required
Originality	7.6	11.5	9.3	<	Some improvement in abilities may be required
Fluency of Ideas	7.6	11.3	8.3	<<	Extensive improvement in abilities may be required
Category Flexibility	9.0	11.2	11.0	0	Current ability level may be sufficient
Number Facility	6.3	10.8	7.2	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 95
Focus Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051) Associated Occupation: Hydrologists (19-2043)		
Work Activities	Exclusivity of Activity	
Advise governmental or industrial personnel	28	
Analyze geological research data	87	
Analyze scientific research data or investigative findings	27	
Conduct field research or investigative studies	52	
Conduct laboratory research or experiments	57	
Direct and coordinate scientific research or investigative studies	27	

Interpret aerial photographs	69
Perform statistical analysis in physical science or geological research	71
Present research papers or dissertations on physical science issues	78
Use geographical information system (GIS) software	72
Use knowledge of tides and currents	92
Use library or online Internet research techniques	21
Use measuring instruments to collect geological data	89
Use physical science research techniques	68
Use quantitative research methods	35
Use teaching techniques	29
Write research or project grant proposals	33
Write scholarly or technical research papers	36

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: n/a

**Focus Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)**

**Associated Occupation: Hydrologists (19-2043)**

### Tools and Technologies

### Exclusivity

Tools and technology data is unavailable for one or both occupations.

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.